# **NISTTech**

PROBE MODULE, METHOD FOR MAKING AND USE OF SAME

#### **Docket No. 13-025**

# **Applications**

Spectroscopy

Can be used for Contact Resonance Spectroscopy

Spectroscopy

Can be used for Force Distance Spectroscopy

Microscopy

Can be used for Dynamic Lateral force microscopy

### **Advantages**

Multi-Electrode arrays

Multi-electrode arrays enable new measurement modes for AFM

Comercially available tips

Modular electrostatic actuator for a wide range of commercially available tips

Compatabile

compatible with most commercially-available cantilevers

#### **Abstract**

Displacement control of AFM (atomic force microscope) cantilevers has previously be implemented using different forms of actuation and probes. This invention is in regard to electrostatic actuation. The invention is an apparatus for electrostatic actuation using a new design for a cantilever chip holder that is compatible with optical lever based AFM. This new design allows the AFM advantages in several areas over state of the art of electrostatic actuation in an AFM.

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# References

US Patent No. 8,943,611

# **Status of Availability**

This invention is available for licensing exclusively or non-exclusively in any field of use.

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